

Claims

1. An immunogenic composition comprising:
 - (a) an immunogen comprising
 - (i) IL-12, IL-23, or a subunit or component thereof; and
 - (ii) a carrier;
 - and (b) an adjuvant comprising one or more of cholesterol; oil-in-water emulsion; oil-in-water emulsion low dose; tocopherol; liposome; QS21; and 3D-MPL
2. An immunogenic composition according to claim 1 in which the immunogen comprises the P35 subunit of IL-12.
3. An immunogenic composition according to claim 1 in which the immunogen comprises the P40 subunit of IL-12 or IL-23.
4. An immunogenic composition according to claim 2 or 3 in which the immunogen comprises at least one surface epitope of P35 or P40.
5. An immunogenic composition according to claim 1 in which the carrier comprises one or more of: Keyhole Limpet Haemocyanin (KLH); bovine serum albumin (BSA); tetanus toxin (TT), diphtheria toxin (DT); Domain 1 of Fragment C of TT; the translocation domain of DT; Hep B core protein; PADRE; P2; and P30.
6. An immunogenic composition according to any preceding claim in which component (i) is coupled to the carrier by direct covalent coupling.
7. An immunogenic composition according to any of claims 1 to 5 in which component (i) is fused to the carrier.
8. An immunogenic composition according to any preceding claim in which the adjuvant comprises liposome, 3D-MPL and QS21.
9. An immunogenic composition according to any of claims 1 to 7 in which the adjuvant comprises oil-in-water emulsion low dose; 3D-MPL and QS21.

10. An immunogenic composition according to any of claims 1 to 7 in which the adjuvant comprises oil-in-water emulsion low dose; 3D-MPL and QS21.
11. An immunogenic composition according to any of claims 1 to 7 in which the adjuvant comprises oil-in-water emulsion.
12. A process for the manufacture of an immunogenic composition according to any of claims 1 to 11 comprising mixing immunogen (a) with the adjuvant.
13. A vaccine composition comprising the immunogenic composition as described in any of claims 1 to 12 in combination with a pharmaceutically acceptable excipient, adjuvant or vehicle.
14. A process for the manufacture of a vaccine composition according to claim 13 comprising mixing the immunogenic composition of any of claims 1 to 11 with a pharmaceutically acceptable excipient, adjuvant or vehicle.
15. A method of preventing or treating a disease or disorder, in particular an autoimmune-implicated disease by administration of an immunogenic or vaccine composition according to any of claims 1 to 11 or 13.
16. Use of an immunogenic composition according to any of claims 1 to 11 or 13, in the manufacture of a medicament for the prevention, therapy or treatment of a disease or disorder, in particular an autoimmune-implicated disease or disorder.
17. A method or use according to claim 15 or 16, in which the medicament or composition is for prevention, therapy or treatment of a disease or disorder of a mammal.
18. A method or use according to any of claims 15 to 17, in which the medicament or composition is for prevention, therapy or treatment of a disease or disorder of a human.
19. A method or use according to any of claims 15 to 18, in which the medicament or composition is for prevention, therapy or treatment of multiple sclerosis; Crohn's disease; thyroiditis; or rheumatoid arthritis

20. A kit comprising an immunogen according to any preceding claim and an adjuvant comprising one or more of cholesterol; oil-in-water emulsion; oil-in-water emulsion low dose; tocopherol; liposome; QS21; and 3D-MPL.